IN THE CLAIMS:

1-6. (Cancelled).

(Previously Presented) A method of manufacturing a semiconductor device 7. comprising:

providing an amorphous semiconductor film with a metal element for promoting crystallization of said semiconductor film;

heating said amorphous semiconductor film to crystallize said amorphous semiconductor film;

forming a metal element diffusion film comprising a semiconductor over the crystallized semiconductor film, said forming of the metal element diffusion film increasing a defect density of the metal element diffusion film;

diffusing the metal element from the crystallized semiconductor film into the metal element diffusion film; and

removing the metal element diffusion film after the step of diffusing the metal element.

- (Previously Presented) The method of claim 7 wherein said metal element 8. diffusion film is an amorphous silicon film.
- (Previously Presented) The method of claim 7 wherein said metal element 9. diffusion film is a polycrystalline silicon film.
- (Previously Presented) The method of claim 7 wherein said metal element 10. diffusion film is an amorphous SixGe1-x film where 0<x<1.
- (Previously Presented) The method of claim 7 wherein said metal element is at 11. least one of Fe, Co, Ni, Ru, Rh, Pd, Os, Ir, Pt, Cu and Au.
- (Previously Presented) A method of manufacturing a semiconductor device 12. comprising:

W681271.1

providing a selected portion of an amorphous semiconductor film with a metal element for promoting crystallization of said semiconductor film;

heating said amorphous semiconductor film to crystallize said amorphous semiconductor film wherein the crystallization proceeds from said selected portion laterally;

forming a metal element diffusion film comprising a semiconductor over the crystallized semiconductor film, said forming of the metal element diffusion film increasing a defect density of the metal element diffusion film;

diffusing the metal element from the crystallized semiconductor film into the metal element diffusion film; and

removing the metal element diffusion film after the step of diffusing the metal element.

- 13. (Previously Presented) The method of claim 12 wherein said metal element diffusion film is an amorphous silicon film.
- 14. (Previously Presented) The method of claim 13 wherein said metal element diffusion film is a polycrystalline silicon film.
- 15. (Previously Presented) The method of claim 13 wherein said metal element diffusion film is an amorphous Si_xGe_{1-x} film where 0<x<1.
- 16. (Previously Presented) The method of claim 15 wherein said metal element is at least one of Fe, Co, Ni, Ru, Rh, Pd, Os, Ir, Pt, Cu and Au.
- 17. (Previously Presented) A method of manufacturing a semiconductor device comprising:

providing an amorphous semiconductor film with a metal element for promoting crystallization of said semiconductor film;

heating said amorphous semiconductor film to crystallize said amorphous semiconductor film;

forming a metal element diffusion film comprising a semiconductor over the

crystallized semiconductor film, said forming of the metal element diffusion film increasing a defect density of the metal element diffusion film;

diffusing the metal element from the crystallized semiconductor film into the metal element diffusion film by irradiating the crystallized semiconductor film with laser; and

removing the metal element diffusion film after the step of diffusing the metal element.

- 18. (Previously Presented) The method of claim 17 wherein said metal element diffusion film is an amorphous silicon film.
- (Previously Presented) The method of claim 17 wherein said metal element diffusion film is a polycrystalline silicon film.
- 20. (Previously Presented) The method of claim 17 wherein said metal element diffusion film is an amorphous Si_xGe_{1-x} film where 0<x<1.
- 21. (Previously Presented) The method of claim 17 wherein said metal element is at least one of Fe, Co, Ni, Ru, Rh, Pd, Os, Ir, Pt, Cu and Au.
- 22. (Previously Presented) A method of manufacturing a semiconductor device comprising:

providing an amorphous semiconductor film with a metal element for promoting crystallization of said semiconductor film;

heating said amorphous semiconductor film to crystallize said amorphous semiconductor film;

forming an etching stopper film on the crystallized semiconductor film;

forming a metal element diffusion film comprising a semiconductor over the crystallized semiconductor film with the etching stopper film interposed therebetween, said forming of the metal element diffusion film increasing a defect density of the metal element diffusion film;

W681271.1

diffusing the metal element from the crystallized semiconductor film into the metal element diffusion film by irradiating the crystallized semiconductor film with laser; and removing the metal element diffusion film after the step of diffusing the metal element.

- (Previously Presented) The method of claim 22 wherein said metal element 23. diffusion film is an amorphous silicon film.
- (Previously Presented) The method of claim 22 wherein said metal element 24. diffusion film is a polycrystalline silicon film.
- (Previously Presented) The method of claim 22 wherein said metal element 25. diffusion film is an amorphous SixGe1-x film where 0<x<1.
- (Previously Presented) The method of claim 22 wherein said metal element is 26. at least one of Fe, Co, Ni, Ru, Rh, Pd, Os, Ir, Pt, Cu and Au.
- (Previously Presented) The method of claim 22 wherein said etching stopper 27. film comprises silicon nitride.
- (Previously Presented) The method of claim 22 wherein said etching stopper 28. film comprises silicon oxide.
- (Currently Amended) The method according to claim 7 wherein said metal 29. diffusion film is directly formed on said crystallized semiconductor film.
- (New) The method according to claim 12 wherein said metal diffusion film is 30. directly formed on said crystallized semiconductor film.
- (New) The method according to claim 17 wherein said metal diffusion film is 31. directly formed on said crystallized semiconductor film.

W681271.1

- 32. (New) The method of claim 7 further comprising the step of forming an etching stopper film which is interposed between said metal element diffusion film and said crystallized semiconductor film.
- 33. (New) The method of claim 12 further comprising the step of forming an etching stopper film which is interposed between said metal element diffusion film and said crystallized semiconductor film.
- 34. (New) The method of claim 32 wherein said etching stopper film comprises silicon nitride.
- 35. (New) The method of claim 32 wherein said etching stopper film comprises silicon oxide.
- 36. (New) The method of claim 33 wherein said etching stopper film comprises silicon nitride.
- 37. (New) The method of claim 33 wherein said etching stopper film comprises silicon oxide.